FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

BIWEEKLY 2000-15

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Federal Aviation Administration
Regulatory Support Division
Airworthiness Programs Branch, AFS-610
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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability

Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; + - See AD for additional information.

Biweekly 2000-01

99-27-01		Pratt & Whitney	Engine: JT8D-209, -217, -217A, -217C, and -219
99-27-03		Fokker	F27 Mark 050 Series
99-27-04		Rolls-Royce	Engine: Dart 506, 510, 511, 514, 525, 526, 529, 530, +
99-27-05		Boeing	767-200, -300, and -300F Series
99-27-06		Boeing	757-200, -200PF, and -200CB Series
99-27-07	S 98-25-53	Airbus	A300 B4-600R and A300 F4-600R Series
99-27-08		SAAB	SAAB SF340A and SAAB 340B Series
99-27-09		Airbus	A300 B4-203 Series
99-27-10		Airbus	A310 and A300-600 Series
99-27-11		British Aerospace	BAC 1-11 200 and 400 Series
99-27-13		Fokker	F27 Mark 050 Series
99-27-14	S 99-01-15	Airbus	A340-211, -212-, -213, -311, -312, and -313 Series
99-27-15		General Electric	Engine: GE90-76B, -77B, -85B, -90B, and -92B
99-27-16		CFE	Engine: CFE738-1-1B
2000-01-51	E	Bombardier	CL-600-2B16 (CL-604)

Biweekly 2000-02

98-19-15 R1	R 98-19-15	Fairchild	SA226-T, SA226-T(B), SA226-AT, SA226-TC +
99-26-21		Boeing	737-300, -400, -500, -600, -700, and -800 Series
2000-01-01		Airbus	A300 B2-1A, B2-1C, B2-203, B2K-3C, B4-103, B4-2C +
2000-01-02		Raytheon	BAe.125 Series 1000A and 1000B and Hawker 1000 Series
2000-01-03		SAAB	SAAB 2000 Series
2000-01-04		SAAB	SAAB 2000 Series
2000-01-07		Bombardier	DHC-8-100, -200, and -300 Series
2000-01-08		British Aerospace	ATP
2000-01-09		General Electric	Engine: CJ610 Series and CF700 Series
2000-01-12	S 97-14-11	Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-01-13	S 99-08-12	Pratt & Whitney	Engine: JT9D-7, -7A, -7H, -7AH, -7F, -7J, -20, -20J +
2000-01-14		Boeing	777 Series
2000-01-15		Fokker	F27 Mark 050 Series
2000-01-17		McDonnell Douglas	MD-90 Series
2000-01-18		McDonnell Douglas	DC-8 Series
2000-01-51		Bombardier	CL-604 variant of Canadair Model CL-600-2B16 Series
2000-02-01		McDonnell Douglas	DC-8 Series
2000-02-02		Short Brothers	SD3-60 SHERPA, SD3-SHERPA Series and SD3-30 Series
2000-02-03		Boeing	737-300, -400, and -500 Series
2000-02-04		Airbus	A300 Series, A300-600, and A310 Series
2000-02-13		Bombardier	DHC-8-100, -200, and -300 Series

Biweekly 2000-03

99-26-03	COR	McDonnell Douglas	MD-11 Series
2000-02-05	S 98-24-01	British Aerospace	Jetstream 4101
2000-02-06		Bombardier	DHC-8-100, -200, and -300 Series
2000-02-07		Bombardier	DHC-7-100 Series
2000-02-08		Dornier	328-100 Series
2000-02-10		Boeing	747 Series
2000-02-11		Boeing	777-200 Series
2000-02-15		Raytheon	65-90, 65-A90, B90, and C90
2000-02-17		Rolls-Royce	Engine: RB211 Trent 768-60, 772-60, and 772B-60 Series
2000-02-18	S 97-09-14	Boeing	737-100, -200, -300, -400, and -500 Series
2000-02-19	S 90-02-16	Boeing	727 Series
2000-02-20	S 95-13-12 R1	Boeing	767 Series
2000-02-21		British Aerospace	Jetstream 4101

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Biweekly 2000-03...Cont'd

2000-02-22		Boeing	747-400 Series
2000-02-23		McDonnell Douglas	DC-9-10, -20, -30, -40, and -50 Series and DC-9-81, +
2000-02-24		Airbus	A300, A310, and A300-600 Series
2000-02-33		Boeing	747-400 Series
2000-02-34		Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-02-35		Raytheon	DH.125, HS.125, BH.125 Series 1A, 1B, 3A, 400A, +
2000-02-36	S 98-20-10	Airbus	A319, A320, and A321 Series
2000-02-37		Boeing	747 Series
2000-02-38	S 91-20-07	Airbus	A300, A300-600, and A310 Series
2000-03-01		Boeing	747-100 and -200 Series
2000-03-02		General Electric	Engine: GE90-90B, -85B, and -76B Series
2000-03-03		General Electric	Engine: CF34-3A1 and -3B1 Series

Biweekly 2000-04

99-23-26 R1		General Electric	Engine: CF34-1A, CF34-3A, -3A1, -3A2, and CF34-3B +
2000-02-27		Embraer - Empresa Brasileira	EMB-110P1 and EMB-110P2
2000-02-39		Airbus	A300 Series
2000-03-04		General Electric	Engine: CF6-80C2 Series turbofan
2000-03-05		Boeing	737-200 Series
2000-03-07		Rolls-Royce	Engine: RB211-524H-36 Series turbofan
2000-03-08		McDonnell Douglas	MD-90-30
2000-03-10		McDonnell Douglas	MD-11 Series
2000-03-11		McDonnell Douglas	MD-11 Series
2000-03-12		McDonnell Douglas	MD-11 Series
2000-03-13		McDonnell Douglas	MD-11 Series
2000-03-14		McDonnell Douglas	MD-11 Series
2000-03-15		McDonnell Douglas	MD-11 and MD-11F Series
2000-03-16		McDonnell Douglas	MD-11 Series
2000-03-17	S 97-23-01	Fairchild	SA226 and SA227 Series
2000-03-20		Airbus	A300-600
2000-03-21		Boeing	767
2000-03-22		Boeing	747-100, -200, and 747SP Series
2000-04-02		Boeing	737-100, -200, -300, -400, and -500 Series
2000-04-03		McDonnell Douglas	DC-3 and DC-4 Series
2000-04-04		Fokker	F.28 Mark 0070 and 0100 Series
2000-04-05		Israel	Astra SPX Series
2000-04-06		Airbus	A319, A320, and A321 Series
2000-04-07		British Aerospace	ATP
2000-04-08		Boeing	737-200C Series
2000-04-09		Embraer - Empresa Brasileira	EMB-135 and EMB-145 Series
2000-04-10		Hoffmann	Propeller: HO27( ) and HO4/27 Series
2000-04-11		Airbus	A319, A320, and A321 Series

Biweekly 2000-05

98-21-21	R1	Bob Fields Aerocessories	Appliance: Electric inflatable door seals
2000-03-51		McDonnell Douglas	DC-9, MD-90-30, 717-200, and MD-88
2000-04-12		Cameron	Appliance: Titanium Propane Cylinders
2000-04-13		Aerospatiale	ATR72 Series
2000-04-14		General Electric	Engine: CF6-80C2 A1/A2/A3/A5/A8/A5F/B1/B2/B4/B6 +
2000-04-17		Boeing	747-100, -200, and -300 Series
2000-04-18		Boeing	757 Series
2000-04-19		Dassault	Mystere-Falcon 50 Series
2000-04-22		Rolls-Royce	Engine: RB211-524G2-T-19, RB211-524G3-T-19, +
2000-04-23		Dornier	328-100 Series and 328-300 Series

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Biweekly 2000-05...Cont'd

2000-05-09		Boeing	757-200, -200PF, and –200CB Series
2000-05-10		General Electric	Engine: GE90-85B Series turbofan

Biweekly 2000-06

2000-03-03	COR	General Electric	Engine: CF34-3A1 and -3B1 Series turbofan
2000-04-24		Honeywell International	Appliance: 36-300(A), 36-280(B), and 36-280(D) Series
2000-05-01		McDonnell Douglas	MD-11 Series
2000-05-02		Fokker	F27 Mark 050, 200, 500, and 600 Series
2000-05-04		Airbus	A330 and A340 Series
2000-05-05		Construcciones Aeronauticas	CN-235-100 and CN-235-200 Series
2000-05-07		Airbus	A300 and A300-600 Series
2000-05-08		Airbus	A319 and A321 Series
2000-05-14	S 80-22-53	AlliedSignal	Engine: ALF502 and LF507 Series turbofan
2000-05-18		Airbus	A300, A310, and A300-600 Series
2000-05-19		Boeing	727 Series
2000-05-20		Dassault	Fan Jet Falcon, Mystere-Falcon 20, 50, 00, and 900 Series +
2000-05-21		Airbus	A319, A320, A321, A330, and A340 Series
2000-05-24		Honeywell International	Appliance: KAP 140 or KFC 225 autopilot system
2000-05-25	S 96-14-09	British Aerospace	BAe 146-100A, and -300 Series
2000-05-26	S 93-18-04	Aerospatiale	ATR42-200, ATR42-300, and ATR42-320 Series
2000-05-27	S 98-21-06	British Aerospace	BAe 146-100A, -200A, and -300A Series
2000-05-28		British Aerospace	BAe 146 and Avro 146-RJ Series
2000-05-29		Boeing	737-100, -200, -300, -400, and -500 Series
2000-05-30		Boeing	747-100, -100B, -100B SUD, -200B, -200C, -200F, -300 +
2000-06-02		Dornier	228-100, 228-101, 228-200, 228-201, 228-202, +
2000-06-04		Fairchild	SA226-T, SA226-AT, SA226-T(B), SA227-AT, +

Biweekly 2000-07

2000-05-22		CFM International	Engine: CFM56-2, -2A, -2B, -3, -3B, and -3C Series
2000-06-08	S 98-01-15	Airbus	A330-301, -321, -322, -341, -342, A340-211, -212, -213 +
2000-06-13	S 98-25-06	Boeing	737-200, -200C, -300, -400 Series
2000-07-01	S 98-13-34	Embraer-Empresa Brasileira	EMB-145 Series
2000-07-02		McDonnell Douglas	MD-11 Series
2000-07-51	E	McDonnell Douglas	717-200 Series

Biweekly 2000-08

2000-01-05	S 99-18-03	Boeing	747-100B, -200, -300, and SP Series
2000-05-03		Airbus	A300-600 and A310 Series
2000-05-12		Rolls-Royce	Engine: RB211-524G2-19, RB211-524G3-19, +
2000-05-13		Boeing	737-100, -200, -300, -400, and -500 Series
99-13-08 R1		Lockheed	L-1011-385 Series
99-23-22 R2	Recission	Transport Category Airplanes	Appliance: Mode “C” Transponder
2000-07-05	S 99-07-06	Boeing	767 Series
2000-07-06		Boeing	737-100, -200, -200C, -300, -400, and -500 Series
2000-07-07		Airbus	A300 Series
2000-07-08		Boeing	777 Series
2000-07-10		Boeing	747-200B, -300, -400, -400D, -400F Series
2000-07-11		Industrie Aero. Mec.	Piaggio P-180
2000-07-13		Boeing	757-200, -200PF Series
2000-07-14		McDonnell Douglas	MD-11 Series
2000-07-15		McDonnell Douglas	MD-11 Series
2000-07-16	S 94-11-06	McDonnell Douglas	MD-11 and MD-11F Series

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Biweekly 2000-08...Cont'd

2000-07-18		McDonnell Douglas	MD-11 and MDj-11F Series
2000-07-20		McDonnell Douglas	MD-11 Series
2000-07-21		McDonnell Douglas	MD-11 Series
2000-07-22		Airbus	A300-600 Series
2000-07-23		Bombardier	DHC-8-100 Series
2000-07-24		Fokker	F.28 Mark 0070 and 0100
2000-07-25		Gulfstream Aerospace	G-IV Series
2000-07-27		Transport Category Airplanes	Appliance: Honeywell Air Data Inertial Reference Unit
2000-07-28	S 99-18-22	Fokker	F27 Series
2000-07-29	S 98-16-09	Airbus	A300, A310, and A300-600 Series
2000-08-01		Rolls-Royce	Engine: Tay 650-15 Series Turbofan
2000-08-03	S 2000-05-01	McDonnell Douglas	MD-11 Series

Biweekly 2000-09

95-19-04 R1	Rescission	Learjet	35, 35A, 36, 36A, 55, 55B, and 55C
99-27-14	COR S 99-01-15	Airbus industrie	A340-211, -212, -213, -311, -312, and –313 Series
2000-05-06		Raytheon Aircraft Company	400A series and 400T Series
2000-07-04		Dornier Luftfahrt GMBH	328-100 series
2000-07-09		Boeing	737-600, -700, and –800 series
2000-07-12		Boeing	727-100, -100C, and –200 Series
2000-07-17		McDonnell Douglas	MD-11 Series
2000-07-19		McDonnell Douglas	MD-11 Series
2000-07-26		Airbus Industrie	A300 Series
2000-07-51		McDonnell Douglas	717-200 Series
2000-08-07	S 96-24-16	Raytheon Aircraft Co	BAe 125-800A and BAe 125-800B, Hawker 800, +
2000-08-08		Boeing	737-600, -700, and –800 Series
2000-08-10	S 99-08-17	General Electric Company	Engine: GE90-76B/ -77B/ -85B/ -90B/ -92B Series
2000-08-11	S 99-08-18	General Electric Company	Engine: CF6-6, CF6-45, and CF6-50 Series
2000-08-12	S 99-08-13	General Electric Company	Engine: CF6-80A, CF6-80C2, and CF6-80E1 Series
2000-08-13		Learjet	45
2000-08-14		Boeing	747 Series
2000-08-15		Boeing	777 Series
2000-08-17		Boeing	737-100, -200, -300, -400, and –500 Series
2000-08-19		Boeing	727 and 727C series
2000-08-20		Lockheed	L-1011-385-1, -1-14, -1-15, and –3 Series
2000-08-21		Boeing	747 Series
2000-09-01	S 93-20-02	McDonnell Douglas	DC-8 Series
2000-09-02		McDonnell Douglas	DC-8 Series
2000-09-03	S 2000-02-33	Boeing	747-400 Series
2000-09-04	S 2000-02-20	Boeing	767 Series
2000-09-05		Allison Engine Company	Engine: AE 3007A, AE 3007A1, AE 3007A1/1, +

Biweekly 2000-10

2000-08-18		McDonnell Douglas	DC-9 series, MD-88, MD-90-30
2000-09-07		McDonnell Douglas	DC-10-10, -15, -30, -30F, and -40 Series, +
2000-09-08		Boeing	747-100, -200, 747SP, and 747SR Series
2000-09-09	S 99-01-12	Embraer - Empresa Brasileira	EMB-145
2000-09-10		Airbus Industrie	A300-600 Series
2000-09-11		Fokker Services BV	F.28 Mark 0070
2000-09-12		Raytheon Aircraft Company	400A series, 400T (T-1A) Series, 400T (TX) Series
2000-09-13		British Aerospace	Jetstream 3201
2000-09-14		Rolls-Royce	Engine: RB211-535 Series

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AD No.	Information	Manufacturer	Applicability

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Biweekly 2000-10...Cont'd

2000-10-02		Airbus	All A319, A320, A321, A330, and A340 Series
2000-10-03		McDonnell Douglas	DC-10 Series
2000-10-51	E	Boeing	767 Series

Biweekly 2000-11

2000-04-05	C	Israel Aircraft Industries	Astra SPX Series
2000-10-01	S 96-08-08	Airbus Industrie	A300 B2, A300 B2K, A300 B2-200, A300 B4-2C, +
2000-10-04		Israel Aircraft Industries	1124 and 1124A Westwind
2000-10-11		Gulfstream Aerospace	G-159 Series
2000-10-12		Boeing	747-400 Series
2000-10-15	S 93-08-15	Airbus Industire	A320 Series
2000-10-16	S 98-14-11	Airbus Industrie	A319, A320, and A321 Series
2000-10-17		Boeing	747 Series
2000-10-18	S 96-11-05	Airbus Industrie	A300, A300-600, and A310 Series
2000-10-19		Israel Aircraft Industries	1125 Westwind Astra and Astra SPX Series
2000-10-21		Boeing	737-300, -400, and –500 Series
2000-10-23	S 97-26-21	Boeing	747-100, 747-200, 747-300, 747SR, and 747SP Series
2000-11-01		McDonnell Douglas	DC-9-81 (MD-81), DC-9-82 (MD-82), +
2000-11-02		McDonnell Douglas	DC-10-10F, DC-10-15, DC-10-30, DC-10-30F, +

Biweekly 2000-12

2000-10-20		Lockheed	L-1011-385 Series
2000-10-51		Boeing	767 Series
2000-11-03		Dassault Aviation	Falcon 2000, Mystere-Falcon 900, Falcon 900EX, +
2000-11-06		Boeing	767 Series
2000-11-07	S 97-05-01	Boeing	747-200, -300, and –400 Series
2000-11-08	S 98-08-23	Boeing	747 and 767 Series
2000-11-09		Airbus	A319, A320, and A321 Series
2000-11-10	S 94-18-03	Rolls-Royce	Engine: RB211-22B and –524 Series
2000-11-11		Boeing	777-200 Series
2000-11-12		General Electric Company	Engine: CF6-45/50 Series
2000-11-13		Fokker Services	F.28 Mark 1000, 2000, 3000, and 4000 Series
2000-11-15		AlliedSignal (Honeywell)	Engine: ALF502R and LF507 Series
2000-11-19		Boeing	767-200 and –300 Series
2000-11-20		Bombardier Inc.	DHC-8-100 and –300 Series
2000-11-21		Airbus Industrie	A319, A320, and A321 Series
2000-11-22		Allison Engine	Engine: AE 3007A, AE3007A1/1, AE 3007A1/2, +
2000-11-23		Airbus Industrie	A300, A310, and A300-600 Series
2000-11-24		British Aerospace Regional	ATP
2000-11-25		Airbus Industrie	A320-232 and –233 Series
2000-11-26		Airbus Industrie	A330 and A340 Series
2000-11-27		Airbus Industrie	A319, A320, and A321 Series
2000-11-28		Boeing	747-400 , 767-200 and –300 Series
2000-11-29		Fokker Services	F27 Mark 050, 100, 200, 300, 400, 500, 600, +
2000-12-01	S 99-08-16	CFM International	Engine: CFM56-2, -2A, -2B, -3, -3B, -3C, -5, -5B, +
2000-12-02	S 99-08-15	Pratt & Whitney	Engine: PW4050, PW4052, PW4056, PW4060, +
2000-12-04	S 97-11-01	Airbus Industrie	A319, A320, and A321 Series
2000-12-05	S 99-08-11	International Aero Engines	Engine: AG (IAE) V2500-A1/-A5/-D5 Series
2000-12-06		Airbus Industrie	A330 and A340 Series
2000-12-07		Saab Aircraft	SAAB SF340A, and SAAB 340B Series
2000-12-15		Dassault Aviation	Falcon 2000, Mystere-Falcon 900, Falcon 900EX, +

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Biweekly 2000-13

95-26-03	S 95-15-51	Pratt & Whitney	Engine: JT8D-1, -1A, -1B, -7, -7A, -7B, -9, -9A, -11, -15, +
2000-12-08		General Electric Company	Engine: CF6-80C2A1/A2/A3/A5/A5F/A8/D1F
2000-12-11	S 95-07-05	Airbus Industrie	A300-600 Series
2000-12-12	S 95-10-03	Airbus Industrie	A300, A300-600, A310 Series
2000-12-13	S 97-21-10	Airbus Industrie	A319, A320, and A321 Series
2000-12-14		SAAB Aircraft	SF340A and 340B Series
2000-12-16	S 99-05-06	Boeing	747 Series
2000-12-17		Boeing	767 Series
2000-12-18		Rolls Royce	Engine: Dart 511, 511-7E, 514-7, 528, 528-7E, 529-7E, +
2000-12-19		Boeing	747 Series
2000-12-20		Airbus Industrie	A310 Series
2000-12-21		Boeing	747-400 Series
2000-13-02		Embraer-Empresa Brasileira	EMB-135 and EMB-145 Series
2000-13-03		McDonnell Douglas	DC-8 Series
2000-13-04	S 99-25-13 C1	Boeing	777-200 and –300 Series

Biweekly 2000-14

2000-09-01 R1	S 93-20-02	McDonnell Douglas	DC-8 Series
2000-13-01		Allison Engine	Engine: AE 3007A and AE 3007C Series
2000-13-05		Rolls-Royce	Engine: RB211 Trent 768-60, Trent 772-60, +
2000-13-07		Airbus Industrie	A330 and A340 Series
2000-13-09		SAAB Aircraft	SAAB 2000 Series
2000-13-51	E	Boeing	737-200 and –300 Series
2000-14-08		New Piper Aircraft	PA-42, PA-42-720, PA-42-720R, and PA-42-1000

Biweekly 2000-15

2000-12-21	COR	Boeing	747-400 Series
2000-13-51		Boeing	737-200 and -300 Series
2000-14-01		Boeing	747 Series
2000-14-02		Boeing	737-600, -700, and -800 Series
2000-14-03		SAAB Aircraft	SF340A and 340B Series
2000-14-04		Boeing	747 Series
2000-14-05		Boeing	777 Series
2000-14-06	S 98-21-29	Boeing	747 Series
2000-14-07	S 97-25-15	Boeing	727 Series
2000-14-09		Short Brothers	SD3-60 Series
2000-14-10	S 96-07-01	McDonnell Douglas	DC-10-10, -15, -30, and -40 Series and MD-10-10F and +
2000-14-11		Boeing	747 Series
2000-14-12		McDonnell Douglas	MD-11 Series
2000-14-13		Boeing	737-200, -300, -400, and -500 Series
2000-14-14		BFGoodrich	Appliance: Main brake assemblies
2000-14-15		Airbus Industrie	A319, A320, and A321 Series
2000-14-17	S 96-21-02	Bombardier	CL-600-2B19 Series
2000-15-02		Boeing	747-400 Series
2000-15-51	E	Cessna	560XL

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

CORRECTION Issued July 2000
This AD was previously published in the Federal Register without the Appendix. This correction contains the appendix.

2000-12-21 BOEING: Amendment 39-11799. Docket 99-NM-66-AD.

Applicability: Model 747-400 series airplanes equipped with Pratt & Whitney PW4000 series engines; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent inadvertent deployment of a thrust reverser during flight and consequent reduced controllability of the airplane, accomplish the following:

Modifications

(a) For airplanes identified in Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998: Accomplish the requirements of paragraphs (a)(1) and (a)(2) of this AD at the times specified in those paragraphs. Accomplishment of these actions constitutes terminating action for the inspections and tests required by paragraph (a) of AD 94-15-05, amendment 39-8976.

(1) Within 36 months after the effective date of this AD: Install an additional locking system on each engine thrust reverser in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998.

Note 2: Installations accomplished prior to the effective date of this AD in accordance with Boeing Service Bulletin 747-78-2155, Revision 1, dated January 30, 1997, are considered acceptable for compliance with paragraph (a)(1) of this AD.

(2) Prior to or concurrent with the installation required by paragraph (a)(1) of this AD, accomplish the requirements of paragraphs (a)(2)(i), (a)(2)(ii), and (a)(2)(iii) of this AD:

(i) Modify the central maintenance computer system hardware and software in accordance with Boeing Service Bulletin 747-45-2016, Revision 1, dated May 2, 1996.

(ii) Modify the integrated display system software in accordance with Boeing Service Bulletin 747-31-2245, dated June 27, 1996.

(iii) Install the provisional wiring for the locking system on the thrust reversers in accordance with Boeing Service Bulletin 747-78-2154, Revision 3, dated December 11, 1997.

Note 3: Installations accomplished prior to the effective date of this AD in accordance with Boeing Service Bulletin747-78-2154, Revision 1, dated November 2, 1995, and Revision 2, dated October 31, 1996, are considered acceptable for compliance with paragraph (a)(2)(iii) of this AD.

Repetitive Functional Tests

(b) Within 4,000 hours time-in-service after accomplishment of paragraph (a) of this AD, or production equivalent; or within 1,000 hours time-in-service after the effective date of this AD, whichever occurs later: Perform a functional test to detect discrepancies of the additional locking system on each engine thrust reverser, in accordance with Appendix 1 of this AD.

Prior to further flight, correct any discrepancy detected and repeat the functional test of that repair, in accordance with the procedures described in the Boeing 747-400 Airplane Maintenance Manual. Repeat the functional test thereafter at intervals not to exceed 4,000 hours time-in-service.

Terminating Action: Airplanes Having Line Numbers 1067 and Higher

(c) For airplanes having line numbers 1067 and higher on which the intent of Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998, was accomplished during production: Accomplishment of the repetitive functional tests required by paragraph (b) of this AD constitutes terminating action for the repetitive inspections and functional tests required by paragraph (a) of AD 94-15-05, amendment 39-8976.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraph (b) of this AD, the actions shall be done in accordance with Boeing Service Bulletin 747-78-2155, Revision 2, dated November 5, 1998; Boeing Service Bulletin 747-45-2016, Revision 1, dated May 2, 1996; Boeing Service Bulletin 747-31-2245, dated June 27, 1996; or Boeing Service Bulletin 747-78-2154, Revision 3, dated December 11, 1997; as applicable. This incorporation by reference was approved previously by the Director of the Federal Register as of July 28, 2000 (65 FR 39079, June 23, 2000). Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(g) The effective date of this amendment remains July 28, 2000.

FOR FURTHER INFORMATION CONTACT: Larry Reising, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2683; fax (425) 227-1181.

Issued in Renton, Washington, on July 11, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

APPENDIX 1.
THRUST REVERSER SYNC-LOCK - ADJUSTMENT/TEST

1. General

A. There are two sync-locks for each engine thrust reverser. The sync-lock is installed on the lower non-locking hydraulic actuator of each thrust reverser sleeve.

B. The Thrust Reverser Sync-Lock Integrity Test has two tasks:

(1) The first task does a test of the electrical circuit which controls the operation of the sync-lock on each thrust reverser sleeve.

(2) The second task does a test of the mechanical function of the sync-lock on each thrust reverser sleeve.

C. The thrust reverser sync-lock is referred to as “the sync-lock” in this procedure.

2. Thrust Reverser Sync-Lock Integrity Test

A. Equipment - Multi-meter, Simpson 260 or equivalent - commercially available

B. Prepare to do the integrity test for the sync-locks

(1) Supply electrical power

(2) For the applicable engine, make sure these circuit breakers on the Main Power Distribution Panel P6, are closed:

6F12 ENG 1 T/R IND
6E12 ENG 2 T/R IND
6D12 ENG 3 T/R IND
6C12 ENG 4 T/R IND
6F13 ENG 1 T/R CONT
6E13 ENG 2 T/R CONT
6D13 ENG 3 T/R CONT
6C13 ENG 4 T/R CONT
6F11 ENG 1 T/R LOCK CONT
6E11 ENG 2 T/R LOCK CONT
6D11 ENG 3 T/R LOCK CONT
6C11 ENG 4 T/R LOCK CONT

(3) Open the fan cowl panels for the applicable engine.

C. Do the electrical integrity test for the sync-locks.

(1) Do these steps, for the applicable engine, to make sure there are no “hot” short circuits in the electrical system which can accidentally supply power to the sync-locks:

(a) Remove the electrical connector, D20194, from the sync-lock, V170, on the left sleeve of the thrust reverser.

(b) Remove the electrical connector, D20196, from the sync-lock, V171, on the right sleeve of the thrust reverser.

(c) Use a multi-meter on the plug end of the applicable electrical connector to make sure that these conditions are correct:

D20194 PIN 1	D20194 PIN 2	-3 TO +1 VDC AND CONTINUITY (LESS THAN 5 OHMS)
D20196 PIN 1	D20196 PIN 2	-3 TO +1 VDC AND CONTINUITY (LESS THAN 5 OHMS)

(d) If you find the correct conditions, do the mechanical integrity test for the sync-locks.

(e) If you did not find these conditions to be correct, you must do these steps:

1) Make a careful visual inspection of all the electrical wires and connectors between the sync-lock and its power circuit.

2) Repair all the unserviceable electrical wire and connectors that you find.

3) Use the multi-meter again to make sure there are no “hot” short circuits in the electrical system which can accidentally supply power to the sync-locks.

D. Do the mechanical integrity test for the sync-locks.

(1) Supply hydraulic power.

WARNING: MAKE SURE ALL PERSONS AND EQUIPMENT ARE CLEAR OF THE AREA BEHIND EACH THRUST REVERSER. IF YOU DO NOT OBEY THIS INSTRUCTION, INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR IF THE SYNC-LOCKS DO NOT OPERATE CORRECTLY AND THE THRUST REVERSER EXTENDS.

(2) Move the applicable reverser thrust lever aft to try to extend the thrust reverser with hydraulic power.

NOTE: If the thrust reverser sleeves do not extend, the sync-locks are serviceable. If the thrust reverser sleeves extend, the applicable sync-lock did not operate correctly.

(3) Replace the sync-lock(s) on the thrust reverser sleeve(s) that did extend when you moved the reverse thrust levers. Repeat steps 2.D.(1) and 2.D.(2) to verify that functional sync-locks are installed.

(4) Move the applicable thrust reverser lever forward to the stow position.

(5) Install the electrical connector, D20194, on the sync-lock, V170 on the left sleeve of the thrust reverser.

(6) Install the electrical connector, D20196, on the sync-lock, V171, on the right sleeve of the thrust reverser.

WARNING: MAKE SURE ALL PERSONS AND EQUIPMENT ARE CLEAR OF THE AREA BEHIND EACH THRUST REVERSER. IF YOU DO NOT OBEY THIS INSTRUCTION, INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN THE THRUST REVERSERS ARE EXTENDED.

(7) Move the applicable thrust reverser aft to try to extend the thrust reverser with hydraulic power.

NOTE: If the thrust reverser sleeves extended, the sync-locks are serviceable. If the thrust reverser sleeves did not extend, the applicable sync-lock is not serviceable.

(8) Replace the sync-lock(s) on the thrust reverser sleeve that did not extend when you moved the reverse thrust levers. Repeat steps 2.D.(4) through 2.D.(7) to verify that functional sync-locks are installed.

(9) Repeat steps 2.A. through 2.D. for all other engine positions.

E. Put the airplane back to its usual condition.

(1) Move the reverse thrust levers forward to fully retract the thrust reversers on the applicable engine.

(2) Remove the hydraulic power if it is not necessary.

(3) Remove the electrical power if it is not necessary.

(4) Close the fan cowl panels.

BW 2000-15

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-13-51 BOEING: Amendment 39-11826. Docket 2000-NM-216-AD.

Applicability: Model 737-200 and -300 series airplanes equipped with a main deck cargo door installed in accordance with Supplemental Type Certificate (STC) SA2969SO; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct cracking of the lower portion of the main deck cargo door frames, which could result in sudden depressurization, loss or opening of the main deck cargo door during flight, and loss of control of the airplane, accomplish the following:

(a) Prior to further flight after the effective date of this AD, perform a special detailed inspection using a borescope to detect cracking of the main deck cargo door frames, their existing reinforcing angles (where applicable), and the attach holes of the latch fittings between frame station (FS) 361.87 and FS 498.12, and between water line (WL) 202.35 and WL 213.00, in the area where the main deck cargo door latch fittings attach to the frames.

(1) If no cracking is detected, repeat the inspection thereafter at intervals not to exceed 150 flight cycles.

(2) If any cracking is detected, prior to further flight, accomplish the requirements of either paragraph (a)(2)(i) or (a)(2)(ii) of this AD.

(i) Replace all discrepant parts with new parts having the same part numbers and repeat the special detailed inspection using a borescope thereafter at intervals not to exceed 150 flight cycles.

(ii) Repair in accordance with a method approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA.

NOTE 2: For the purpose of this AD a special detailed inspection is defined as: "An intensive examination of a specific item(s), installation, or assembly to detect damage, failure, or irregularity. The examination is likely to make extensive use of specialized inspection techniques and or equipment. Intricate cleaning and substantial access or disassembly procedure may be required."

Reporting Requirements

(b) Within 10 days after accomplishing the actions required by paragraph (a) of this AD, submit a report of any findings of cracking to the Manager, FAA, Atlanta ACO, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia, fax (770) 703-6097. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Effective Date

(e) This amendment becomes effective on July 25, 2000, to all persons except those persons to whom it was made immediately effective by emergency AD 2000-13-51, issued on July 3, 2000, which contained the requirements of this amendment.

FOR FURTHER INFORMATION CONTACT:

Rany Azzi, Aerospace Engineer, Airframe and Propulsion Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, Suite 450, Atlanta, Georgia 30337-2748, telephone (770) 703-6083; fax (770) 703-6097.

Issued in Renton, Washington, on July 13, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-01 BOEING: Amendment 39-11810. Docket 99-NM-335-AD.

Applicability: Model 747 series airplanes; as listed in Boeing Special Attention Service Bulletin 747-32-2461, dated August 19, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent high velocity separation of a brake system accumulator barrel, piston, or end cap; which could result in injury to personnel in the wheel well area, loss of cabin pressurization, loss of certain hydraulic systems, or damage to the fuel line of the auxiliary power unit; accomplish the following:

Replacement

(a) At the next "C"-check, not to exceed 6,000 flight hours after the effective date of this AD, replace any brake system accumulator that has aluminum end caps with an accumulator that has stainless steel end caps in accordance with Boeing Special Attention Service Bulletin 747-32-2461, dated August 19, 1999.

Spares

(b) As of the effective date of this AD, no person shall install a brake system accumulator having part number (P/N) BACA11E1 (Parker P/N 2660472-1 or 2660472M1) or BACA11E5 (Parker P/N 2660472-5 or 2660472M5) on any airplane.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done in accordance with Boeing Special Attention Service Bulletin 747-32-2461, dated August 19, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(f) This amendment becomes effective on August 23, 2000.

FOR FURTHER INFORMATION CONTACT: Don Kurle, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2798; fax (425) 227-1181.

Issued in Renton, Washington, on July 11, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-02 BOEING: Amendment 39-11811. Docket 2000-NM-209-AD.

Applicability: Model 737-600, -700, and –800 series airplanes, as listed in Boeing Alert Service Bulletin 737-23A1170, dated April 27, 2000; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent loss of communication between the flight crew and Air Traffic Control (ATC), which could result in the flight crew being unaware of an unsafe scenario when the airplane is on the ground, accomplish the following:

Installation of Placards

(a) Within 60 days after the effective date of this AD, install placards on the P3-1 panel in accordance with Boeing Alert Service Bulletin 737-23A1170, dated April 27, 2000.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The installation shall be done in accordance with Boeing Alert Service Bulletin 737-23A1170, dated April 27, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(e) This amendment becomes effective July 28, 2000.

FOR FURTHER INFORMATION CONTACT: Jay Yi, Aerospace Engineer, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1013; fax (425) 227-1181.

Issued in Renton, Washington, on July 3, 2000.
Vi L. Lipski, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

SAAB AIRCRAFT AB
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-03 SAAB AIRCRAFT AB: Amendment 39-11812. Docket 2000-NM-23-AD.

Applicability: Model SAAB SF340A series airplanes, manufacturer's serial numbers 004 through 159 inclusive; and Model SAAB 340B series airplanes, manufacturer's serial numbers 160 through 459 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent false smoke warnings from the cargo compartment smoke detectors, which could result in aborted takeoffs, diversions of flight routes, and emergency evacuation of flight crew and passengers, accomplish the following:

Replacement

(a) Within 2 years after the effective date of this AD, replace the smoke detectors in the cargo compartment with new, improved smoke detectors, in accordance with Saab Service Bulletin 340-26-023, dated December 21, 1999.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with Saab Service Bulletin 340-26-023, dated December 21, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Saab Aircraft AB, SAAB Aircraft Product Support, S-581.88, Linköping, Sweden. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in Swedish airworthiness directive 1-151, dated December 28, 1999.

(e) This amendment becomes effective on August 17, 2000.

FOR FURTHER INFORMATION CONTACT:
Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on July 3, 2000.
Vi L. Lipski, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-04 BOEING: Amendment 39-11813. Docket 2000-NM-206-AD.

Applicability: All Model 747 series airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking of certain areas of the fuselage skin, which could result in reduced structural integrity of the fuselage, and consequent rapid depressurization of the airplane; accomplish the following:

One-Time Detailed Visual Inspection

(a) Prior to the accumulation of 13,000 total flight cycles or within 60 days after the effective date of this AD, whichever occurs later: Perform a one-time external detailed visual inspection of the fuselage skin adjacent to the drag splice fitting as illustrated in Figure 2 of Boeing Service Bulletin 747-53A2444, Revision 1, dated June 15, 2000. If no cracking is detected, no further action is required by this AD.

Note 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Corrective Action

(b) If any cracking is detected during any inspection required by this AD, prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the approval letter must specifically reference this AD.

Secondary Inspection

(c) For airplanes on which cracking is detected during the inspection required by paragraph (a) of this AD, prior to further flight after accomplishment of paragraph (b) of this AD: Determine if a secondary inspection of adjacent structure is required, using the Logic Diagram illustrated in Figure 1 of Boeing Service Bulletin 747-53A2444, Revision 1, dated June 15, 2000. If required, prior to further flight, accomplish the inspection in accordance with the service bulletin.

Note 3: Inspections and repairs accomplished prior to the effective date of this AD in accordance with Boeing Alert Service Bulletin 747-53A2444, dated May 25, 2000, are considered acceptable for compliance with the applicable action specified in this amendment.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The inspections shall be done in accordance with Boeing Service Bulletin 747-53A2444, Revision 1, dated June 15, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(g) This amendment becomes effective on July 28, 2000.

FOR FURTHER INFORMATION CONTACT: Rick Kawaguchi, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1153; fax (425) 227-1181.

Issued in Renton, Washington, on July 3, 2000.

Vi L. Lipski, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-05 BOEING: Amendment 39-11814. Docket 2000-NM-155-AD.

Applicability: Model 777 series airplanes as listed in Boeing Alert Service Bulletin 777-28A0019, dated April 27, 2000; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure adequate electrical bonding between the wing spar connectors of the fuel quantity indicating system (FQIS) and the spar structure in the event of a lightning strike, accomplish the following:

One-Time Measurement and Installation

(a) Within 90 days after the effective date of this AD: Perform a one-time measurement of the electrical bonding resistance between the wing spar connectors of the FQIS and the spar structure, record the measurements, and install bonding jumpers, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 777-28A0019, dated April 27, 2000.

Operational Check and Corrective Action

(b) Prior to further flight after accomplishment of the installation required by paragraph (a) of this AD: Perform an operational check in accordance with Boeing Alert Service Bulletin 777-28A0019, dated April 27, 2000, and correct any discrepancy detected.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done in accordance with Boeing Alert Service Bulletin 777-28A0019, dated April 27, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on July 28, 2000.

FOR FURTHER INFORMATION CONTACT:
Larry Reising, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2683; fax (425) 227-1181.

Issued in Renton, Washington, on July 3, 2000.
Vi L. Lipski, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-06 BOEING: Docket 99-NM-192-AD. Amendment 39-11815. Supersedes AD 98-21-29, Amendment 39-10837.

Applicability: Model 747 series airplanes, line numbers 1 through 1006 inclusive, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent high fuel pressure in components between the fuel shutoff spar valve and the engine fuel shutoff valve, which could result in failure of the fuel system components, lead to fuel leakage, and, consequently, lead to a possible engine fire, accomplish the following:

RESTATEMENT OF ACTIONS REQUIRED BY AD 98-21-29, AMENDMENT 39-10837:

One-Time Inspection

(a) For airplanes having line numbers 629 through 1006 inclusive and powered by General Electric or Rolls-Royce engines: Within 18 months after November 20, 1998 (the effective date of AD 98-21-29, amendment 39-10837), perform a one-time inspection to determine the part number of the fuel shutoff spar valve for the left- and right-hand outboard engines, in accordance with Boeing Alert Service Bulletin 747-28A2199, dated August 1, 1996; Boeing Service Bulletin 747-28A2199, Revision 1, dated October 1, 1998; or Boeing Service Bulletin 747-28A2199, Revision 2, dated July 8, 1999.

Replacement

(1) If a valve having part number (P/N) S343T003-40 (ITT P/N 125334D-1) is installed, no further action is required by this AD.

(2) If a valve having P/N S343T003-40 (ITT P/N 125334D-1) is not installed, prior to further flight, accomplish either paragraph (a)(2)(i) or (a)(2)(ii) of this AD.

(i) Replace the valve with a new valve, in accordance with the service bulletin. Prior to further flight following accomplishment of the replacement, align the valve(s), perform a check to detect leaks, and correct any discrepancy, in accordance with the service bulletin. Or

(ii) Modify the valve body assembly of the fuel system in accordance with ITT Service Bulletin SB125120-28-01, ITT Service Bulletin SB107970-28-01, and ITT Service Bulletin SB125334-28-01; all dated July 15, 1996.

Inspection

(b) For airplanes having line numbers 629 through 1006 inclusive and powered by General Electric or Rolls-Royce engines: Except as provided in paragraph (c) of this AD, prior to further flight following accomplishment of paragraph (a)(2) of this AD, perform a one-time general visual inspection to detect fuel leaks of the components between the fuel shutoff spar valve and the engine fuel shutoff valve on all four engines, in accordance with the applicable section that pertains to Rolls-Royce RB211 series engines or General Electric CF6-80C and CF6-45/50 series engines in Chapter 71 of the Boeing 747 Airplane Maintenance Manual (AMM), or Boeing Service Bulletin 747-28A2199, Revision 2, dated July 8, 1999. If any leak is detected, prior to further flight, replace the part with a serviceable part. No further action is required by this AD.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(c) For airplanes having line numbers 629 through 1006 inclusive, powered by General Electric or Rolls-Royce engines, and having maintenance records that positively demonstrate that the inboard engines have never been located in the outboard position: Prior to further flight following accomplishment of paragraph (a)(2) of this AD, perform a one-time general visual inspection to detect fuel leaks of the components between the fuel shutoff spar valve and the engine fuel shutoff valve on the outboard engines only, in accordance with the applicable section that pertains to Rolls-Royce RB211 series engines or General Electric CF6-80C and CF6-45/50 series engines in Chapter 71 of the Boeing 747 AMM, or Boeing Service Bulletin 747-28A2199, Revision 2, dated July 8, 1999. If any leak is detected, prior to further flight, replace the part with a serviceable part. No further action is required by this AD.

NOTE 3: Accomplishment of the actions specified in AMM 71-00-00/501, Test No. 2, "Fuel and Oil Leak Check," for Rolls-Royce RB211 series engines, and AMM 71-00-00/501, Test No. 3, "Ground Test - Idle Leak Check (or Idle Power)," for General Electric CF6-80C and CF6-45/50 series engines, is acceptable for compliance with the actions specified by paragraphs (b) and (c) of this AD.

NEW ACTIONS REQUIRED BY THIS AD:

Inspection

(d) For airplanes having line numbers 1 through 628 inclusive: Within 18 months after the effective date of this AD, perform a one-time inspection of the maintenance records of the airplane to determine if the fuel shutoff spar valve for the left- and right-hand outboard engines has ever been replaced, in accordance with Boeing Service Bulletin 747-28A2199, Revision 2, dated July 8, 1999.

(1) If the maintenance record inspection establishes that neither valve has been replaced, no further action is required by this AD.

(2) If either valve has been replaced, or if the maintenance record inspection does not clearly establish that neither valve has been replaced, prior to further flight, accomplish paragraph (e)(1), (e)(2), or (e)(3), as applicable.

(e) For airplanes having line numbers 629 through 1006 inclusive and powered by Pratt & Whitney engines, or for airplanes having line numbers 1 through 628 inclusive on which a fuel shutoff spar valve has been, or may have been, replaced: Within 18 months after the effective date of this AD, perform a one-time inspection to determine the part number of the fuel shutoff spar valve for the left- and right-hand outboard engines, as applicable, in accordance with Boeing Alert Service Bulletin 747-28A2199, dated August 1, 1996; Boeing Service Bulletin 747-28A2199, Revision 1, dated October 1, 1998; or Boeing Service Bulletin 747-28A2199, Revision 2, dated July 8, 1999.

Replacement

(1) If a valve having P/N S343T003-40 (ITT P/N 125334D-1) is installed, no further action is required by this AD.

(2) If a valve having P/N 60B92406-161 (ITT P/N 125334-1), P/N 60B92406-81 (ITT P/N 125120-1), or P/N 60B92406-201 (ITT P/N 107970-1) is installed, accomplish either paragraph (f) or (g) of this AD, as applicable.

(3) If a valve having P/N S343T003-40 (ITT P/N 125334D-1), P/N 60B92406-161 (ITT P/N 125334-1), P/N 60B92406-81 (ITT P/N 125120-1), or P/N 60B92406-201 (ITT P/N 107970-1) is not installed, prior to further flight, accomplish either paragraph (e)(3)(i) or (e)(3)(ii), and either paragraph (f) or (g) of this AD, as applicable.

(i) Replace the valve with a new valve, in accordance with the service bulletin. Prior to further flight following accomplishment of the replacement, align the valve(s), perform a check to detect leaks, and correct any discrepancy, in accordance with the service bulletin. Or

(ii) Modify the valve body assembly of the fuel system in accordance with ITT Service Bulletin SB125120-28-01, ITT Service Bulletin SB107970-28-01, and ITT Service Bulletin SB125334-28-01; all dated July 15, 1996.

Inspection

(f) Expect as provided in paragraph (g) of this AD, prior to further flight following accomplishment of paragraph (e) of this AD, perform a one-time general visual inspection to detect fuel leaks of the components between the fuel shutoff spar valve and the engine fuel shutoff valve on all four engines, in accordance with Boeing Service Bulletin 747-28A2199, Revision 2, dated July 8, 1999. If any leak is detected, prior to further flight, replace the part with a serviceable part.

(g) For airplanes having maintenance records that positively demonstrate that the inboard engines have never been located in the outboard position: Prior to further flight following accomplishment of paragraph (e) of this AD, perform a one-time general visual inspection to detect fuel leaks of the components between the fuel shutoff spar valve and the engine fuel shutoff valve on the outboard engines only, in accordance with Boeing Service Bulletin 747-28A2199, Revision 2, dated July 8, 1999. If any leak is detected, prior to further flight, replace the part with a serviceable part.

NOTE 4: Accomplishment of the actions specified in AMM 71-00-00/501, Test No. 2, "Fuel and Oil Leak Check," for Rolls-Royce RB211 series engines, and AMM 71-00-00/501, Test No. 3, "Ground Test - Idle Leak Check (or Idle Power)," for General Electric CF6-80C and CF6-45/50 series engines, is acceptable for compliance with the actions specified by paragraphs (f) and (g) of this AD.

Alternative Methods of Compliance

(h) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 98-21-29, amendment 39-10837, are approved as alternative methods of compliance with paragraph (a), (a)(1), (a)(2), (a)(2)(i), (b), and (c) of this AD.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(j) Except as provided by paragraphs (b) and (c) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 747-28A2199, dated August 1, 1996; Boeing Service Bulletin 747-28A2199, Revision 1, dated October 1, 1998; Boeing Service Bulletin 747-28A2199, Revision 2, dated July 8, 1999; ITT Service Bulletin SB125120-28-01, dated July 15, 1996; ITT Service Bulletin SB107970-28-01, dated July 15, 1996; or ITT Service Bulletin SB125334-28-01, dated July 15, 1996; as applicable.

(1) The incorporation by reference of Boeing Service Bulletin 747-28A2199, Revision 1, dated October 1, 1998; and Boeing Service Bulletin 747-28A2199, Revision 2, dated July 8, 1999; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Alert Service Bulletin 747-28A2199, dated August 1, 1996; ITT Service Bulletin SB125120-28-01, dated July 15, 1996; ITT Service Bulletin SB107970-28-01, dated July 15, 1996; and ITT Service Bulletin SB125334-28-01, dated July 15, 1996; was approved previously by the Director of the Federal Register as of November 20, 1998 (63 FR 55517, October 16, 1998).

(3) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207; or ITT Aerospace Controls, 28150 Industry Drive, Valencia, California 91355. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(k) This amendment becomes effective on August 17, 2000.

FOR FURTHER INFORMATION CONTACT: Dionne M. Krebs, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2250; fax (425) 227-1181.

Issued in Renton, Washington, on July 3, 2000.

Vi L. Lipki, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-07 BOEING: Amendment 39-11816. Docket 99-NM-75-AD. Supersedes AD 97-25-15, Amendment 39-10239.

Applicability: Model 727 series airplanes having line numbers 858 through 864 inclusive, 867 through 869 inclusive, 872 through 883 inclusive, and 885 through 1832 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent cracking of the rear spar web, which could permit fuel leakage into the airflow multiplier, and could result in an electrical short that could cause a fire, accomplish the following:

RESTATEMENT OF THE REQUIREMENTS OF AD 97-25-15:

Inspections

(a) Prior to the accumulation of 15,000 total flight cycles, or within 300 flight cycles after December 27, 1997 (the effective date of AD 97-25-15, amendment 39-10239), whichever occurs later: Accomplish the inspections specified in either paragraph (a)(1) or (a)(2) of this AD, in accordance with Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. For purposes of the AD, the access panels specified in the alert service bulletin need not be removed; the access panels need only be opened.

NOTE 2: The fuel tank of the wing center section may be filled with fuel to assist in detecting cracking or fuel leakage during the accomplishment of the visual inspections required by this AD.

(1) Perform a visual inspection using a borescope or mirror to detect cracking of the rear spar web and/or fuel leakage of the wing center section between right body buttock line (BBL) 40 and left BBL 40, in accordance with Part I of the Accomplishment Instructions of the service bulletin. Thereafter, repeat this inspection at intervals not to exceed 300 flight cycles. Or

(2) Perform an ultrasonic and high frequency eddy current (HFEC) inspection to detect cracking of the rear spar web of the wing center section between right BBL 40 and left BBL 40, in accordance with Part II of the Accomplishment Instructions of the service bulletin. Thereafter, repeat this inspection at intervals not to exceed 3,000 flight cycles.

Repair

(b) If any cracking of the rear spar web and/or fuel leakage of the wing center section is detected between right BBL 40 and left BBL 40 near the upper machined land radius, prior to further flight, repair in accordance with Part III of the Accomplishment Instructions in Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. Accomplishment of this repair constitutes terminating action for the repetitive inspection requirements of this AD.

(c) If any cracking of the rear spar web and/or fuel leakage of the wing center section is detected that is outside the area specified in paragraph (b) of this AD, prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

NEW REQUIREMENTS OF THIS AD:

Modification

(d) Prior to the accumulation of 60,000 total flight cycles, or within 3,000 flight cycles after the effective date of this AD, whichever occurs later, accomplish an ultrasonic and HFEC inspection in accordance with the requirements of paragraph (a)(2) of this AD.

(1) If no cracking is detected, prior to further flight, modify the rear spar web of the center section of the fuel tank between right BBL 40 and left BBL 40, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. Accomplishment of this modification constitutes terminating action for the repetitive inspection requirements of this AD.

(2) If any cracking is detected, prior to further flight, repair and modify the rear spar web in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. Accomplishment of this modification constitutes terminating action for the repetitive inspection requirements of this AD.

Alternative Methods of Compliance

(e) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 97-25-15, amendment 39-10239, are approved as alternative methods of compliance with this AD.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished, provided the limitations specified in paragraphs (f)(1) through (f)(6) of this AD are included in the special flight permit:

"(1) Required trip and reserve fuel must be carried in the No. 1 and No. 3 outer wing tanks.

(2) Wing center tank No. 2 must be empty of fuel.

(3) The fuel system must be checked for normal operation prior to flight by verifying that all boost pumps are operational; configuring the fuel system by turning on all boost pumps in the No.'s 1 and 3 outer wing tanks and by opening all crossfeed valve selectors; and by confirming that fuel is not bypassing tank No. 2 check valves by observing that there is not leakage into tank No. 2.

(4) Maintain a minimum of 5,300 pounds of fuel in tanks No. 1 and No. 3 to prevent uncovering the fuel bypass valve.

(5) The fuel quantity indication system must be operational in all three tanks.

(6) The effects of loading fuel only in the wing tanks on the airplane weight and balance must be considered and accounted for."

Incorporation by Reference

(g) Except as provided by paragraph (c) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997; or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999.

(1) The incorporation by reference of Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999, is approved by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, was approved previously by the Director of the Federal Register as of December 29, 1997 (62 FR 65355, December 12, 1997).

(3) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(h) This amendment becomes effective on August 17, 2000.

FOR FURTHER INFORMATION CONTACT:
Walter Sippel, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2774; fax (425) 227-1181.

Issued in Renton, Washington, on July 3, 2000.
Vi L. Lipski, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

SHORT BROTHERS PLC
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-09 SHORT BROTHERS PLC: Amendment 39-11818. Docket 2000-NM-12-AD.

Applicability: Model SD3-60 series airplanes, certificated in any category, serial numbers SH3716 through SH3763 inclusive.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent the display of incorrect engine limitations, which could result in an overspeed of the propellers and potential for blade failure, accomplish the following:

Label Replacement and AFM Revision

(a) Within 6 months after the effective date of this AD: Replace the existing engine-limitations label with a new label containing revised engine limitations, and revise the Limitations section of the FAA-approved airplane flight manual to reflect the revised engine limitations; in accordance with Shorts Service Bulletin SD360-11-23, dated November 17, 1998.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with Shorts Service Bulletin SD360-11-23, dated November 17, 1998. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Short Brothers, Airworthiness & Engineering Quality, P.O. Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in British airworthiness directive 015-11-98.

Effective Date

(e) This amendment becomes effective on August 23, 2000.

FOR FURTHER INFORMATION CONTACT:
Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on July 7, 2000.
John J. Hickey, Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-10 MCDONNELL DOUGLAS: Amendment 39-11820. Docket 98-NM-228-AD. Supersedes AD 96-07-01, Amendment 39-9549.

Applicability: Model DC-10-10, -15, -30, and -40 series airplanes, Model MD-10-10F and MD-10-30F series airplanes, and KC-10A (military) airplanes; as listed in McDonnell Douglas DC-10 Service Bulletin 55-23, Revision 1, dated December 17, 1993; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent cracking of the attachment fasteners of the vertical stabilizer, which could result in loss of fail-safe capability of the vertical stabilizer and reduced controllability of the airplane, accomplish the following:

External Visual Inspection

(a) Except as required by paragraph (c)(3) of this AD, within 1,500 landings after April 24, 1996 (the effective date of AD 96-07-01, amendment 39-9549): Perform an external visual inspection, using a minimum 5X power magnifying glass, to detect any failure of the 12 attachment fasteners located in the banjo No. 4 fitting of the vertical stabilizer (as specified in McDonnell Douglas DC-10 Service Bulletin 55-23, Revision 1, dated December 17, 1993; or McDonnell Douglas Service Bulletin DC10-55-023, Revision 02, dated October 30, 1996, or Revision 03, dated March 25, 1998). Perform this inspection in accordance with procedures specified in McDonnell Douglas Nondestructive Testing Manual, Chapter 20-10-00, or McDonnell Douglas Nondestructive Testing Standard Practice Manual, Part 09.

No Failure Condition: Repetitive Inspections

(1) If no failure is detected, repeat the external visual inspection thereafter at intervals not to exceed 1,500 landings until the requirements of paragraph (b) of this AD are accomplished.

Any Failure Condition: Corrective Actions

(2) If any failure is detected, prior to further flight, accomplish the requirements of paragraph (b) of this AD.

Eddy Current Surface Inspection and Eddy Current Bolt Hole Inspection

(b) Except as required by paragraphs (a)(2) and (c)(3)(ii) of this AD, within 5 years after April 24, 1996: Perform an eddy current surface inspection to detect cracking of the forward and aft flanges; and an eddy current bolt hole inspection of the bolt holes of the banjo No. 4 fitting; in accordance with McDonnell Douglas DC-10 Service Bulletin 55-23, Revision 1, dated December 17, 1993; or McDonnell Douglas Service Bulletin DC10-55-023, Revision 02, dated October 30, 1996, or Revision 03, dated March 25, 1998.

Note 2: Paragraph (b) of this AD does not require that eddy current bolt hole inspections be accomplished for the bolt holes of the banjo No. 4 fitting if the attachment fasteners were replaced prior to April 24, 1996, in accordance with McDonnell Douglas DC-10 Service Bulletin 55-23, dated December 17, 1992.

No Cracking Condition: Replacement

(1) If no cracking is detected, prior to further flight, replace the 12 attachment fasteners located on the banjo No. 4 fitting with new, improved attachment fasteners, in accordance with McDonnell Douglas DC-10 Service Bulletin 55-23, dated December 17, 1992, or Revision 1, dated December 17, 1993; or McDonnell Douglas Service Bulletin DC10-55-023, Revision 02, dated October 30, 1996, or Revision 03, dated March 25, 1998. After the effective date of this AD, only Revision 03 of the service bulletin shall be used.

(i) Accomplishment of the replacement in accordance with the original issue of the service bulletin constitutes terminating action for the requirements of paragraph (a) of this AD, provided that the eddy current surface inspection of the forward and aft flanges is accomplished in accordance with McDonnell Douglas DC-10 Service Bulletin 55-23, Revision 1, dated December 17, 1993; or McDonnell Douglas Service Bulletin DC10-55-023, Revision 02, dated October 30, 1996, or Revision 03, dated March 25, 1998.

(ii) Accomplishment of the replacement in accordance with McDonnell Douglas DC-10 Service Bulletin 55-23, Revision 1, dated December 17, 1993; or McDonnell Douglas Service Bulletin DC10-55-023, Revision 02, dated October 30, 1996, or Revision 03, dated March 25, 1998; constitutes terminating action for the requirements of paragraph (a) of this AD, provided that the eddy current surface inspection of the forward and aft flanges, and the eddy current bolt hole inspection of the bolt holes of the banjo No. 4 fitting, are accomplished in accordance with McDonnell Douglas DC-10 Service Bulletin 55-23, Revision 1, or McDonnell Douglas Service Bulletin DC10-55-023, Revision 02, or Revision 03.

Any Cracking Condition: Repair

(2) If any cracking is detected, prior to further flight, repair either in accordance with Figure 6 or Figure 7, as applicable, of Chapter 55-20-00, Volume 1, of the DC-10 Structural Repair Manual; or in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

One-Time Detailed Visual Inspection and Follow-On Actions, If Necessary

(c) For airplanes that have not accomplished the requirements of paragraph (b) in accordance with McDonnell Douglas Service Bulletin DC10-55-023, Revision 03, dated March 25, 1998: Within 1,500 landings after the effective date of this AD, perform a one-time detailed visual inspection to determine whether second oversize fasteners having part number (P/N) S4931917-8Y are installed in the banjo No. 4 fitting of the vertical stabilizer.

Note 3: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) If second oversize fasteners having P/N S4931917-8Y are <u>not</u> installed, and the actions required by paragraph (b) of this AD have been accomplished, no further action is required by this AD.

(2) If second oversize fasteners having P/N S4931917-8Y are <u>not</u> installed, and the actions required by paragraph (b) of this AD have <u>not</u> been accomplished: Within 1,500 landings after the last inspection performed in accordance with paragraph (a) of this AD, repeat that inspection, and perform the follow-on actions specified by paragraph (a) of this AD.

(3) If second oversize fasteners having P/N S4931917-8Y <u>are</u> installed, prior to further flight, perform an external visual inspection to detect any failure of the 12 attachment fasteners located in the banjo No. 4 fitting of the vertical stabilizer in accordance with paragraph (a) of this AD.

(i) If no failure is detected, accomplish the actions specified in paragraph (c)(3)(i)(A) and (c)(3)(i)(B) of this AD.

(A) For any hole that has a P/N S4931917-8Y fastener installed: Repeat the external visual inspection thereafter at intervals not to exceed 1,500 landings until the requirements of paragraph (b) of this AD are accomplished.

(B) For any hole that has a P/N S4931917-8Y fastener installed: Within 5 years after April 24, 1996, or within 1,500 landings from the inspection required by paragraph (c)(3) of this AD, whichever occurs later, accomplish the requirements of paragraph (b) of this AD, except as provided in paragraph (d) of this AD.

(ii) If any failure is detected, prior to further flight, accomplish the requirements of paragraph (b) of this AD for the failed fastener and its associated fastener hole only.

(d) For airplanes on which the repair required by paragraph (b)(2) of this AD has been accomplished prior to the effective date of this AD to comply with paragraph (c)(3)(i)(B) of this AD, accomplish only the eddy current bolt hole inspection of the bolt holes of the banjo No. 4 fitting required by paragraph (b) of this AD.

Spares

(e) As of the effective date of this AD, no person shall install a second oversize fastener having P/N S4931917-8Y in the banjo No. 4 fitting of the vertical stabilizer on any airplane.

Alternative Methods of Compliance

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(h) Except as provided by paragraphs (a), (b)(2), and (c) of this AD, the actions shall be done in accordance with McDonnell Douglas DC-10 Service Bulletin 55-23, dated December 17, 1992; McDonnell Douglas DC-10 Service Bulletin 55-23, Revision 1, dated December 17, 1993; McDonnell Douglas Service Bulletin DC10-55-023, Revision 02, dated October 30, 1996; or McDonnell Douglas Service Bulletin DC10-55-023, Revision 03, dated March 25, 1998; as applicable.

(1) The incorporation by reference of McDonnell Douglas Service Bulletin DC10-55-023, Revision 02, dated October 30, 1996; and McDonnell Douglas Service Bulletin DC10-55-023, Revision 03, dated March 25, 1998; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of McDonnell Douglas DC-10 Service Bulletin 55-23, dated December 17, 1992; and McDonnell Douglas DC-10 Service Bulletin 55-23, Revision 1, dated December 17, 1993; was approved previously by the Director of the Federal Register as of April 24, 1996 (61 FR 12015, March 25, 1996).

(3) Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(i) This amendment becomes effective on August 23, 2000.

FOR FURTHER INFORMATION CONTACT: Ron Atmur, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5224; fax (562) 627-5210.

Issued in Renton, Washington, on July 11, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-11 BOEING: Amendment 39-11821. Docket 99-NM-64-AD.

Applicability: Model 747 series airplanes; certificated in any category; equipped with General Electric Model CF6-45 or -50 series engines.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure the integrity of the fail-safe features of the thrust reverser system by preventing possible failure modes, which could result in inadvertent deployment of a thrust reverser during flight, and consequent reduced controllability of the airplane, accomplish the following:

Repetitive Inspections and Tests

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(a) Within 90 days after the effective date of this AD, perform the applicable detailed visual inspections and tests to verify proper operation of the thrust reverser stow/deploy switches, the bullnose seals, and the airmotor brake on each engine, in accordance with Work Package I of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-78A2160, dated May 4, 1995, including Notice of Status Change 747-78A2160 NSC 1, dated June 8, 1995. Repeat the applicable inspections and tests thereafter at intervals not to exceed 1,500 flight hours, until accomplishment of paragraph (d) of this AD.

(b) Within 6 months after the effective date of this AD, perform the applicable detailed visual inspections and tests to verify proper operation of the overpressure shutoff valve electrical connectors, the flexible shafts, the directional pilot valve, and the microswitch pack for each engine, in accordance with Work Package II of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-78A2160, dated May 4, 1995, including Notice of Status Change 747-78A2160 NSC 1, dated June 8, 1995. Repeat the applicable inspections and tests thereafter at intervals not to exceed 18 months, until accomplishment of paragraph (d) of this AD.

Corrective Actions

(c) If any of the inspections and tests required by paragraphs (a) and (b) of this AD cannot be successfully performed, or if any discrepancy is detected during the inspections and tests, accomplish paragraphs (c)(1) or (c)(2) of this AD, as applicable.

(1) Prior to further flight, repair in accordance with Boeing Alert Service Bulletin 747-78A2160, dated May 4, 1995. Additionally, prior to further flight, any failed inspection or test required by paragraph (a) or (b) of this AD must be repeated and successfully accomplished.

(2) Accomplish both paragraphs (c)(2)(i) and (c)(2)(ii) of this AD.

(i) Prior to further flight, deactivate the associated thrust reverser in accordance with Section 78-1 of Boeing Document D6-33391, "Boeing 747-100/-200/-300/SP Dispatch Deviations Procedures Guide," Revision 22, dated January 30, 1998. No more than one thrust reverser on any airplane may be deactivated under the provisions of this paragraph.

NOTE 3: The airplane may be operated in accordance with the provisions and limitations specified in the operator's FAA-approved Minimum Equipment List (MEL), provided that no more than one thrust reverser on the airplane is inoperative.

(ii) Within 10 days after deactivation of any thrust reverser in accordance with paragraph (c)(2)(i) of this AD, the affected thrust reverser must be repaired in accordance with Boeing Alert Service Bulletin 747-78A2160, dated May 4, 1995. Additionally, prior to further flight, any failed inspection or test required by paragraph (a) or (b) of this AD must be repeated and successfully accomplished; once such inspections and tests have been successfully accomplished, the thrust reverser may then be reactivated.

Modification

(d) Within 48 months after the effective date of this AD, install a thrust reverser actuation system (TRAS) lock on each thrust reverser half of each engine, in accordance with Boeing Service Bulletin 747-78-2150, Revision 1, dated July 2, 1998. All of the modifications described in the service bulletins listed in paragraphs I.K.1.h. and I.K.1.j. of Boeing Service Bulletin 747-78-2150, Revision 1, must be accomplished, as applicable, in accordance with those service bulletins, prior to, or concurrently with, the accomplishment of the installation of the TRAS lock. Accomplishment of these actions constitutes terminating action for the repetitive inspections required by paragraphs (a) and (b) of this AD.

NOTE 4: Accomplishment of the installation specified in Boeing Service Bulletin 747-78-2150, dated March 20, 1997, is acceptable for compliance with the installation required by paragraph (d) of this AD.

Functional Tests

(e) Within 3,000 flight hours after accomplishing the modification required by paragraph (d) of this AD, or within 1,000 flight hours after the effective date of this AD, whichever occurs later, perform a functional test of the TRAS lock on each reverser half, in accordance with Chapter 78-34-00 of the Boeing 747 Maintenance Manual, dated April 25, 1998.

Corrective Actions

(1) If no discrepancy is detected, repeat the functional test thereafter at intervals not to exceed 3,000 flight hours.

(2) If any discrepancy is detected, prior to further flight, repair in accordance with the procedures specified in the Boeing 747 Maintenance Manual. Additionally, prior to further flight, the functional test must be successfully accomplished. Repeat the functional test thereafter at intervals not to exceed 3,000 flight hours.

Spares

(f) If, after incorporation of the modification required by paragraph (d) of this AD on any airplane, it becomes necessary to install a thrust reverser assembly that does not have the TRAS locks installed, dispatch of the airplane is allowed in accordance with the provisions and limitations specified in the operator's FAA-approved MEL, provided that the thrust reverser assembly that does not have the TRAS locks installed is deactivated in accordance with Section 78-1 of Boeing Document D6-33391, "Boeing 747-100/-200/-300/SP Dispatch Deviations Procedures Guide," Revision 22, dated January 30, 1998. No more than one thrust reverser on any airplane may be deactivated under the provisions of this paragraph. Within 10 days after deactivation of the thrust reverser, install a thrust reverser assembly that has the TRAS locks installed and reactivate the thrust reverser.

(g) If, prior to incorporation of the modification required by paragraph (d) of this AD on any airplane, it becomes necessary to install a thrust reverser assembly that has the TRAS locks installed, dispatch of the airplane is allowed in accordance with the provisions and limitations specified in the operator's FAA-approved MEL, provided that the thrust reverser assembly that has the TRAS locks installed is deactivated in accordance with Section 78-1 of Boeing Document D6-33391, "Boeing 747-100/-200/-300/SP Dispatch Deviations Procedures Guide," Revision 22, dated January 30, 1998. No more than one thrust reverser on any airplane may be deactivated under the provisions of this paragraph. Within 10 days after deactivation of the thrust reverser, install a thrust reverser assembly that does not have the TRAS locks installed and reactivate the thrust reverser.

Alternative Methods of Compliance

(h) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(j) Except as provided by paragraphs (c)(2)(i), (e), (e)(2), (f), and (g) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 747-78A2160, dated May 4, 1995, including Notice of Status Change 747-78A2160 NSC 1, dated June 8, 1995; and Boeing Service Bulletin 747-78-2150, Revision 1, dated July 2, 1998. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(k) This amendment becomes effective on August 23, 2000.

FOR FURTHER INFORMATION CONTACT: Larry Reising, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2683; fax (425) 227-1181.

Issued in Renton, Washington, on July 11, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-12 MCDONNELL DOUGLAS: Amendment 39-11822. Docket 99-NM-246-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD11-25A233, dated June 9, 1999; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent a possible flammable condition, which could result in smoke and fire in the forward crew rest area, accomplish the following:

Replacement

(a) Within 6 months after the effective date of this AD, replace the upper and lower reading lights in the forward crew rest area with a redesigned light fixture, in accordance with McDonnell Douglas Alert Service Bulletin MD11-25A233, dated June 9, 1999.

NOTE 2: McDonnell Douglas Alert Service Bulletin MD11-25A233 refers to AIM Aviation Service Incorporated Service Bulletin AIM-MD11-25-2, Revision C, dated March 8, 1999; as an additional source of service information for accomplishment of the replacement of the upper and lower reading lights in the forward crew rest area.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The replacement shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-25A233, dated June 9, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60).

Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on August 23, 2000.

FOR FURTHER INFORMATION CONTACT:
Albert Lam, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5346; fax (562) 627-5210.

Issued in Renton, Washington, on July 11, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-13 BOEING: Amendment 39-11823. Docket 2000-NM-103-AD.

Applicability: Model 737-200, -300, -400, and -500 series airplanes; as listed in Boeing Service Bulletin 737-25-1322, Revision 2, dated February 19, 1998; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent cracking or breaking of the door handle mounting hub, which could result in the interior door handle breaking off while the door is being opened, and, in an emergency situation, could impede evacuation of the airplane, accomplish the following:

Replacement

(a) Within 18 months after the effective date of this AD, replace existing door handle mounting hub assemblies in the forward and aft entry doors, forward galley door, and aft service door, with new, improved hub assemblies, in accordance with Boeing Service Bulletin 737-25-1322, Revision 2, dated February 19, 1998.

NOTE 2: Replacements accomplished prior to the effective date of this AD in accordance with Boeing Service Bulletin 737-25-1322, dated January 19, 1995, or Revision 1, dated December 19, 1996, are considered acceptable for compliance with paragraph (a) of this AD.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The replacement shall be done in accordance with Boeing Service Bulletin 737-25-1322, Revision 2, dated February 19, 1998. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on August 23, 2000.

FOR FURTHER INFORMATION CONTACT: Keith Ladderud, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2780; fax (425) 227-1181.

Issued in Renton, Washington, on July 12, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BFGOODRICH
AIRWORTHINESS DIRECTIVES
APPLIANCE
LARGE AIRCRAFT

2000-14-14 BFGOODRICH: Amendment 39-11824. Docket 2000-NM-210-AD.

Applicability: Model BFGoodrich main brake assemblies having part number (P/N) 2-1598-1 or P/N 2-1600-1, as installed on Airbus Model A319 and A320 series airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct thermal oxidation of the main brake assemblies, which could result in deterioration of the main landing gear (MLG) brakes, and consequent reduced braking performance, accomplish the following:

Initial and Repetitive Inspections

(a) Within 10 days after the effective date of this AD, or within 500 flight cycles after replacement of any brake assembly, whichever occurs later: Perform an inspection to determine the length of the wear indicator pins of each main brake assembly of the MLG, in accordance with the Accomplishment Instructions of BFGoodrich Service Bulletin 2-1598-32-2 or 2-1600-32-3, both dated June 16, 2000, as applicable. Repeat the inspection thereafter for each brake assembly as specified by paragraph (a)(1), (a)(2), (a)(3), or (a)(4), as applicable.

(1) If the length of both wear indicator pins is greater than 2.00 inches, repeat the inspection thereafter at intervals not to exceed 500 flight cycles.

(2) If the length of the shortest wear indicator pin is between 2.00 and 1.50 inches, repeat the inspection thereafter at intervals not to exceed 250 flight cycles.

(3) If the length of the shortest wear indicator pin is between 1.49 and 1.0 inches, repeat the inspection thereafter at intervals not to exceed 100 flight cycles.

(4) If the length of the shortest wear indicator pin is between 0.31 and 0.99 inches, repeat the inspection thereafter at intervals not to exceed 10 days.

(5) If the length of the shortest wear indicator pin is less than 0.31 inches, no further action is required by this paragraph until the brake is replaced.

Follow-on Inspections and Corrective Actions

(b) During any inspection required by paragraph (a) of this AD, if the length of the shortest wear indicator pin measures between 0.31 and 0.70 inches: Prior to further flight, perform a one-time special detailed inspection of the rotor disks located in the center of the heat sinks of the main brake assemblies of the MLG to detect the level of oxidation on the main brake assemblies in accordance with the Accomplishment Instructions of BFGoodrich Service Bulletin 2-1598-32-2 or 2-1600-32-3, both dated June 16, 2000, as applicable. The inspection required by this paragraph is required only the first time the length of the shortest wear indicator pin measures between 0.31 and 0.70 inches.

(1) If no oxidation is detected, or if oxidation within the limits specified in the applicable service bulletin is detected on any brake assembly, continue the inspections required by paragraph (a) of this AD.

(2) If any oxidation exceeding the limits specified in the applicable service bulletin is detected on any brake assembly, prior to further flight, replace the brake assembly with a new brake assembly in accordance with the applicable service bulletin. Within 500 flight cycles following such replacement, continue the inspections required by paragraph (a) of this AD.

NOTE 2: For the purposes of this AD, a special detailed inspection is defined as: "An intensive examination of a specific item(s), installation, or assembly to detect damage, failure, or irregularity. The examination is likely to make extensive use of specialized inspection techniques and/or equipment. Intricate cleaning and substantial access or disassembly procedures may be required."

(c) During any inspection required by paragraph (a) of this AD, if the length of the shortest wear indicator pin measures 0.30 inches or less: Prior to further flight, perform a one-time special detailed inspection of the rotor disks located in the center of the heat sinks of the main brake assemblies of the MLG to detect the level of oxidation on the main brake assemblies in accordance with the Accomplishment Instructions of BFGoodrich Service Bulletin 2-1598-32-2 or 2-1600-32-3, both dated June 16, 2000, as applicable. The inspection required by this paragraph is required only the first time the length of the shortest wear indicator pin measures 0.30 inches or less.

(1) If no oxidation is detected, or if oxidation within the limits specified in the applicable service bulletin is detected on any brake assembly, no further action is required by this AD until the brake is replaced in accordance with the FAA-approved maintenance program. Within 500 flight cycles following such replacement, continue the inspections required by paragraph (a) of this AD.

(2) If any oxidation exceeding the limits specified in the applicable service bulletin is detected on any brake assembly, prior to further flight, replace the brake assembly with a new brake assembly in accordance with the applicable service bulletin. Within 500 flight cycles following such replacement, continue the inspections required by paragraph (a) of this AD.

Spares

(d) As of the effective date of this AD, no person shall install on any airplane a BFGoodrich main brake assembly having P/N 2-1598-1 or P/N 2-1600-1 if the wear indicator pin measures 0.70 inches or less, unless an inspection to detect oxidation of the brake assembly has been accomplished in accordance with paragraph 3.A.(3) of the Accomplishment Instructions of BFGoodrich Service Bulletin 2-1598-32-2 or 2-1600-32-3, both dated June 16, 2000, as applicable.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(g) Except as provided by paragraph (c)(1) of this AD, the inspections and replacement actions shall be done in accordance with BFGoodrich Service Bulletin 2-1598-32-2, dated June 16, 2000, or BFGoodrich Service Bulletin 2-1600-32-3, dated June 16, 2000; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from BFGoodrich Aerospace Wheel & Brake Systems Division, P.O. Box 340, Troy, Ohio, 45373. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(h) This amendment becomes effective on August 7, 2000.

FOR FURTHER INFORMATION CONTACT: Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on July 13, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

AIRBUS INDUSTRIE
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-15 AIRBUS INDUSTRIE: Amendment 39-11825. Docket 2000-NM-55-AD.

Applicability: Model A319, A320, and A321 series airplanes; certificated in any category; excluding those on which Modifications 27150 and 27955 have been installed.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent ignition sources and consequent fire/explosion in the fuel tank, accomplish the following:

Modification and Installation

(a) Within 36 months after the effective date of this AD, modify the fuel pipe couplings and install bonding leads in the specified locations of the fuel tank, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-28-1077, dated July 9, 1999.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with Airbus Service Bulletin A320-28-1077, dated July 9, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 3: The subject of this AD is addressed in French airworthiness directive 2000-006-144(B), dated January 12, 2000.

(e) This amendment becomes effective on August 28, 2000.

FOR FURTHER INFORMATION CONTACT:
Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

Issued in Renton, Washington, on July 13, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BOMBARDIER, INC.
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-17 BOMBARDIER, INC. (Formerly Canadair): Amendment 39-11828. Docket 98-NM-260-AD. Supersedes AD 96-21-02, Amendment 39-9778.

Applicability: Model CL-600-2B19 series airplanes having serial numbers 7003 through 7207 inclusive, certificated in any category; except those airplanes on which Canadair Regional Jet Service Bulletin S.B. 601R-34-094, Revision 'B,' dated November 14, 1997, has been accomplished.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent uncommanded changes in the settings on the pilot's and co-pilot's instrument displays, which could result in confusion among the flight crew about the correct position and flight configuration of the airplane, accomplish the following:

RESTATEMENT OF THE REQUIREMENTS OF AD 96-21-02, AMENDMENT 39-9778:

(a) Within 3 days after October 15, 1996 (the effective date of AD 96-21-02, amendment 39-9778), revise the Limitations Section of the FAA-approved Airplane Flight Manual (AFM) to include the following statement. This may be accomplished by inserting a copy of this AD in the AFM.

"Prior to each takeoff and after any event during which generators are switched, check the settings of the barometric altimeter, altitude pre-selector, V-speed, and speed bug. If any discrepancy is detected, reset, as necessary."

NEW REQUIREMENTS OF THIS AD:

AFM Temporary Revision

(b) Within 2 days after the effective date of this AD, revise the Emergency, Normal, and Abnormal Procedures Sections, and Supplements 4 and 8 of the FAA-approved AFM by inserting Canadair Regional Jet Temporary Revision RJ/50-2, dated June 1, 1997, into the applicable section of the AFM.

NOTE 2: The AFM revisions required by paragraph (b) of this AD are accomplished by inserting a copy of the Temporary Revisions into the applicable section of the AFM. When these Temporary Revisions have been incorporated into the general revisions of the AFM, the general revisions may be inserted into the AFM, provided that the information contained in the general revisions is identical to that specified in the Temporary Revisions.

Replacement

(c) Within 18 months after the effective date of this AD, modify the air data reference systems in accordance with Canadair Regional Jet Service Bulletin S.B. 601R-34-094, Revision 'B,' dated November 14, 1997. After accomplishment of the modification, the AFM revisions required by paragraphs (a) and (b) of this AD may be removed from the AFM.

NOTE 3: Accomplishment of the modification in accordance with Canadair Regional Jet Service Bulletin S.B. 601R-34-094, Revision 'C,' dated September 17, 1998; Revision 'D,' dated March 12, 1999; or Revision 'E,' dated October 12, 1999; is acceptable for compliance with the requirements of paragraph (c) of this AD.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York Aircraft Certification Office (ACO), FAA, Engine and Propeller Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, New York ACO.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraph (a) of this AD, the actions shall be done in accordance with Canadair Regional Jet Temporary Revision RJ/50-2, dated June 1, 1997; and Canadair Regional Jet Service Bulletin S.B. 601R-34-094, Revision 'B,' dated November 14, 1997. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, Canada. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Engine and Propeller Directorate, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 5: The subject of this AD is addressed in Canadian airworthiness directive CF-96-16R1, dated June 24, 1998.

(g) This amendment becomes effective on August 28, 2000.

FOR FURTHER INFORMATION CONTACT:

Peter Cuneo, Aerospace Engineer, Systems and Flight Test Branch, ANE-172, FAA, Engine and Propeller Directorate, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York 11581; telephone (516) 256-7506; fax (516) 568-2716.

Issued in Renton, Washington, on July 14, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-02 BOEING: Amendment 39-11831. Docket 2000-NM-151-AD.

Applicability: Model 747-400 series airplanes having line numbers (L/N) 1162 through 1223, except L/N 1174; equipped with horizontal stabilizer fuel tanks; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent damage of certain wire bundles routed to the fuel tank transfer pumps in the horizontal stabilizer, which could result in electrical arcing and a possible fire adjacent to the fuel tank, accomplish the following:

One-Time Inspection and Corrective Actions

(a) Within 60 days after the effective date of this AD, perform a one-time detailed visual inspection of wire bundles routed to the fuel tank transfer pumps in the horizontal stabilizer to determine if wire bundles W4601 and W4602 are routed correctly and to detect damage, in accordance with Boeing Alert Service Bulletin 747-28A2232, Revision 1, dated June 22, 2000.

(1) If the wire bundles are routed correctly and no damage is detected, no further action is required by this AD.

(2) If either wire bundle is determined to be incorrectly routed, but no damage is detected, prior to further flight, reroute the affected wire bundle in accordance with the alert service bulletin.

(3) If any damage is detected (whether the wire bundles are routed properly or not), prior to further flight, repair the affected wire bundle and route the wire bundle correctly, as applicable, in accordance with the alert service bulletin.

Note 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Note 3: Inspections and corrective actions accomplished prior to the effective date of this AD in accordance with Boeing Alert Service Bulletin 747-28A2232, dated March 2, 2000, are considered acceptable for compliance with the applicable action specified in this amendment.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with Boeing Alert Service Bulletin 747-28A2232, Revision 1, dated June 22, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(e) This amendment becomes effective on August 9, 2000.

FOR FURTHER INFORMATION CONTACT:

Sulmo Mariano, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2686; fax (425) 227-1181.

Issued in Renton, Washington, on July 17, 2000.

Vi L. Lipski, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-15

CESSNA AIRCRAFT COMPANY
AIRWORTHINESS DIRECTIVES
EMERGENCY
LARGE AIRCRAFT

AD 2000-15-51 CESSNA AIRCRAFT COMPANY: Docket No. 2000-NM-255-AD.

Applicability: Model 560XL airplanes, certificated in any category; serial numbers (S/N) -5002 and subsequent.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent interference between the aileron cable fairlead tube and the aileron cable sector, which could result in loss of control of the airplane, accomplish the following:

Pre-modification Inspection

(a) For airplanes having S/N -5002 through -5093 inclusive: Before the next flight after receipt of this AD, perform a general visual inspection to measure how far the aileron fairlead tube protrudes beyond the clamp at the aft aileron sector. This area of the airplane is depicted in Figure 1 of Cessna Service Bulletin SB560XL-27-10, including Service Bulletin Supplemental Data, dated July 13, 2000. Thereafter, repeat the inspection at intervals not to exceed 5 flight cycles until accomplishment of paragraph (b) of this AD. If, during any inspection required by this paragraph, more than one-half inch of the tube is found to protrude, prior to further flight, accomplish the actions specified by paragraph (b) of this AD.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

Modification

(b) For airplanes having S/N -5002 through -5093 inclusive: Within 25 flight hours or 30 days after receipt of this AD, whichever occurs first, modify the aileron fairlead tubes (including trimming the fairlead tube and cementing the clamp to the tube with fuel tank sealer) in accordance with Cessna Service Bulletin SB560XL-27-10, including Service Bulletin Supplemental Data, dated July 13, 2000. Allow 2 hours of cure time before further flight. Accomplishment of the modification terminates the repetitive inspection requirement of paragraph (a) of this AD.

Post-modification Inspection

(c) For all airplanes: At the applicable time specified by paragraph (c)(1) or (c)(2) of this AD, perform a general visual inspection to determine if the fairlead tube is flush with the clamp. This area of the airplane is depicted in Figure 1 of Cessna Service Bulletin SB560XL-27-10, including Service Bulletin Supplemental Data, dated July 13, 2000. If the tube is not flush, prior to further flight, repeat the actions specified by paragraph (b) of this AD, and notify the Manager, Wichita Aircraft Certification Office (ACO), FAA, Mid-Continent Airport, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone (316) 946-4106; fax (316) 946-4407. Repeat the inspection thereafter at intervals not to exceed 110 flight hours.

(1) For airplanes having S/N -5002 through -5093 inclusive: At the next scheduled maintenance or within 110 flight hours after the modification required by paragraph (b) of this AD, whichever occurs first.

(2) For S/N -5094 and subsequent: At the next scheduled maintenance or within 110 flight hours after receipt of this AD, whichever occurs first.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Wichita ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Wichita ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(f) **AD 2000-15-51, issued on July 19, 2000, becomes effective upon receipt.**

FOR FURTHER INFORMATION CONTACT: Shane Bertish, Aerospace Engineer, Systems and Propulsion Branch, ACE-116W, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone (316) 946-4156; fax (316) 946-4407.

Issued in Renton, Washington, on July 19, 2000.

D.L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.